

### ELECTRO-TELEGRAPHIC PROGRESS. TRANSATLANTIC ORGANISATION OF THE TELEGRAPH.

If the railways are "working wonders," says an American contemporary, the telegraph is out-stripping them in achievements. Almost every state is now in instantaneous communication with New York. Merchants, both American and British, transmit their orders to their remotest agents, and even talk of throwing off a reel of submarine wires across the Atlantic. At any rate they already insulate them in their lakes, and thread them through their rivers. New York, Washington, Pittsburg, Buffalo, Baltimore, Philadelphia, and the other cities of the Atlantic are enabled to talk by them simultaneously with one another; and now that the telegraph between Buffalo and Toronto is completed, a citizen standing on the northern bank of the Ontario, may hold a pleasant parley and *à la tête* with a friend on the western shore of the Atlantic. The progress of electric communication in America, in short, is far more marvellous and immense than any thing we yet know of in the mother country. Buffalo, Boston, and New York are comparatively next door neighbours. Intelligence flies through the country every minute in flashes of electricity; the merchant negotiates a loan, or consummates a purchase with a customer in a market a hundred miles off; and journals, distant a day's journey from Congress, have their speeches and proceedings in print while the speaker is in "possession of the floor." The Americans themselves, go-ahead as they are, can scarcely familiarize themselves with the wonders of this new creation of science. Several of the telegraphs have been put out of order by the storms, with the exception of the New York and Philadelphia line, the wire of which is said to weigh 330 lbs. to the mile, and is represented as capable of sustaining a weight of two tons. Instances have occurred of what the Yankees call dizzling by telegraph; and knavish speculators have even caused the wires to be broken in order to serve their 'commercial' purposes. The first flash of the telegraph in Canada occurred last month between Hamilton and Toronto. The communication was open to all without payment, and messages without end were transmitted. The New York and Buffalo Electro-telegraphic Company have at length established the fact, that electric telegraphs may be made safe and profitable investments. A dividend of 3 per cent. for the five months ending 7th of February has been declared by this company, and constitutes, indeed, the first dividend ever declared. The earnings of the line have been 11,000 dollars since 7th of September, of which the expenses have absorbed about one-third. Of this dividend the patentees got 27,000 dollars,—the first financial result of this noble invention.

In our own country, the progress at present appears to be deriving a decided impetus from the infusion of a spice of the Transatlantic invention and advancement. In the Admiralty extension of the South-Western Telegraph from the office in the Strand, formerly the Courier office, to the Admiralty, the pipes are very properly laid inside the kerb-stone, and connecting posts will be placed at intervals for the inspection of defects or injuries. The line runs on the north side of the Strand to Agar-street, and then crosses onwards to Charing Cross, where another crossing leads it into the Admiralty. By the middle of June, the communication will be complete between the Admiralty and the Portsmouth Admiralty office, and by the sub-marine telegraph between that and Gueport.

**URBAN BURIAL.**—Under this title Mr. J. D. Parry has just now published, as a small pamphlet, the accounts of London churchyards, with suggestions for joint parochial cemeteries, which originally appeared some time since in our pages. Its distribution cannot fail to aid the efforts now making to modify, if not prevent, intra-mural interments.

**YEovil TOWN HALL COMPETITION.**—We are informed that in the competition for the New Town Hall and Market at Yeovil, the first premium was awarded to Mr. Stent of that town, and the second to Mr. Morris Davis of Langport, in the neighbourhood.

\* STRANGE, PAMPHLET, &c.

### PROPOSED VALVE FOR THE GRATINGS OF SEWERS.

THE engraving below represents a hydrostatic valve, proposed to prevent the emission of gases from sewers and drains, registered by Mr. F. Abate. It is an application of the hydrostatic law, that a body specifically lighter than water must float on it. A spherical recipient is placed between the mouth of the drain and the grating above; and a valve, spherical also, and very light, which resting on the recipient closes the inferior hole of it, that is to say, shuts the entrance to the sewer. When water comes into the recipient the valve will float; and thus the mouth of the drain being open, the water discharges itself through it, till at length the valve, the inventor believes,



will replace itself upon the orifice, which will then be again closed.

The inventor says,—"The recipient as well as the valve may be constructed of different materials, and very cheaply. For the first, cast-iron, baked clay, or cement would be proper. The second may be made with sheet-iron, or copper, or wood (covered with a good varnish repellant of water), or with india-rubber inflated." We are not aware that any have yet been made.

### JONES'S MORTICE CUTTING MACHINE.

To satisfy several inquirers who fear, with much reason, to trust advertisements, we have examined Mr. Jones's invention for cutting mortices, recently registered; and are disposed to think it will be found of considerable service, especially in large establishments. It consists of an upright frame, in front of which, at a convenient height for the workman, is fixed a piece of timber, called the table, on bolts working in slots in the front of the frame, to regulate the height of the board in which the mortice is to be cut. The mortice-chisel is fitted into a collar, turning in an arm at the top of the machine; and this arm is adjusted to the thickness of the timber to be morticed, by means of a slide. This collar is connected by a vertical rod and springs, with a treadle, and while the wood is guided by the hands of the operator, the rapid action of his foot on the treadle, brings down the chisel, and forms the required mortice in a very short space of time, and much more truly than it could be done by hand; the action of the springs is to force up the tool from the wood—the latter being kept firm in its place by two projecting brackets.

The saving in time must be very great. We trust the inventor will reap the reward of his ingenuity, and we do not hesitate to direct attention to the machine.

**VAT VENTILATION.**—The risk and loss of life by suffocation from carbonic acid gas in brewery vats and distillery fermenting-baths, and the loss of time by the usual method of ventilation, are proposed, by a correspondent of the *Times*, to be obviated by pumping in common air by the portable force-pumps or jiggers in use in all breweries, whereby the gas may be 'blown out' in three or four hours, instead of requiring two or three days for its gradual dissipation as heretofore.

### SHALL ARCHITECTS ONLY COPY?

Sir,—Have the two following sentences in Paley's "Manual of Gothic Mouldings" escaped the eyes of THE BUILDER? Surely they have, or they would not pass without remark. In speaking of what a work on mouldings might be, he says: "It may either contain a great collection of the best examples, accurately reduced to a scale, or accompanied by measurements, so as to form a magazine of reference, and thus supply the wants of practical men, who are often driven to invent, from not having at hand, and being unable to procure in their immediate neighbourhood, any available models" (p. 5, introduction). *Driven to invent!* This is really very shocking of the architects of England, and may well bring down upon them the censure of the Cambridge Camdenists. What have architects to do with invention? According to modern ideas, nothing; therefore read the following—it's very pathetic—"Strange, that with such noble examples of rich perspective effect and artistic display before them, architects will generally persist in inventing mouldings for themselves, rather than copy any of the perfect works of ancient art, which are every where to be met with, and of all degrees of costliness."

Well, I confess it is a strange infatuation on their part to invent for themselves; it certainly shews a deplorable want of respect for the ancients, and shews, moreover, a presumptuous reliance on their own powers which is not at all becoming in modern architects! As I said before, what has an architect to do with invention? And our author answers, nothing. He says as plain as words can say, copy. The receipt of "how to build a church" is given much after the following fashion:

Take windows from that church, doors from this; columns, mouldings, caps, and sashlar work *ad libitum*, from various others, put them into a sack, give them a good shake, and let them fall out on a sheet of paper; note their positions, and draw out your plans at leisure.

Shall architects copy? Our masters say they shall, and so there is nothing for the young architects of England but to do as they are bid. Many of them, however, have gone on this tack long since, and I have no doubt find it adds weight to their purses. Henceforth, instead of new styles and progress, our motto must be "retrograde and copy." And we ought to go back at the same rate that the engineers go forward; for this is as it should be. Art received its highest finish in the 14th century, and it is nothing but reasonable and just that succeeding centuries should go back to that period, and draw from it as from a quarry. There is a profanity and presumption in inventing for ourselves, and I wonder architects ever had the audacity to do it; but "fools rush in," &c., &c. J. S. C.

### NOTES IN THE PROVINCES.

At Windsor Castle, the completion of the long projected improvements lately alluded to in THE BUILDER, has been begun by the sale and demolition of the old houses erected in the reign of James the First for poor knights. They are to be altogether cleared away by the 4th of May next, and the space they have occupied will then be converted into a public terrace walk, intended, eventually, to be continued all along the western front of the castle wall, until it joins the north terrace erected by Queen Elizabeth. The new barracks at Horfield, near Bristol, are now almost completed. The cost of the erection has been about \$7,000; and the contract has been fulfilled within the time specified, notwithstanding the occurrence of the extensive fire already noticed in THE BUILDER. Besides accommodation for four companies of infantry, and two troops of horse, with an extensive area for exercise, there are baths, an hospital, horse-infirmary, chapel, library, reading room, granaries, magazine, &c.; and privates, and non-commissioned officers are here to be educated at the expense of Government. It is proposed to build a new church in Lewin's Mead, says the *Bristol Journal*, to be dedicated to St. Mary Magdalene. Trowbridge church is about to be rebuilt and generally restored. The erection of a Lu-